

Invention disclosure submission.  
Complete all sections and send to the Nortel Patent Dept at:  
OTTAWA, Canada: Patent Dept., 0265, NTPAT  
or HARLOW, UK: Patent Dept., HAL05  
or RICHARDSON, USA: Patent Dept., Mail Stop C-0419, RICH1

No. ID1048

Rec'd. 03 Jul 98

Attny/Agent

**NORTEL**  
NORTHERN TELECOM

Invention Title

SDH/SONET Virtual Concatenation

Correspondence will be directed to the first-named inventor only.

(1) Full legal name of first inventor (include middle initial)				Residence and post office address if different	
Russell John Paul				21 The Orchards	
Name usually known as:				Sawbridgeworth	
Global ID				Herts.	
3200755				CM21 9BB	
Phone	Location	Department	Mailstop	Occupation	Fax
742-2631	HAL02	GI41			
Signature			Date	Citizen of	
				UK	

(2) Name of supervisor or divisional head		(5) Project Number
David Barnskill		7539
Name of AVP Reported to:		(6) Indicate your LOB
Peter Schuddeboom		Broadband Networks
Signature	Date	If Advanced Technology, please indicate which group.
		Please Make a Selection

Technical field

(3) Date of first written description:		Key words for searching
		SDH, SONET, Virtual Concatenation
Has this invention been discussed with others? If so, please complete.		
Outside Nortel	To Whom? Robert Franks	Are you aware of any imminent future disclosures? Please detail. I expect this work to be presented to ETSI TM1 in their November meeting.
	When? 2/7/98	
Was there a Non-Disclosure Agreement in place? Assume so!		
Inside Nortel	To Whom? Ewan Bewley	
	When? 3/7/98	

(4) Which products will use this invention?	(7) Is the invention relevant to a Standards activity?
TN1X/C/P, TN4XE, TN16XE, TN16X, TN64X and possibly in some SONET transport equipment. The ASICs to implement this are currently being developed under a fully funded programme.	yes
	If so give details:
	This work will be presented to ETSI TM1 in their November meeting. Following that, it will be taken to ITU-T SG15, where we expect that Lucent will want to propose a different scheme to solve the same problem.
	(8) Does this invention arise from any arrangement involving any external organization? no
	Organization.
	Contract no.

**(a) Brief description of the invention**

The SDH LAN has already been described in patent submissions 0882, 0885, 0888, 0889, 0890, 0932. This new submission was previously described along with 0889 SDH LAN Mapping.

**(b) What is the problem solved by the invention?**

The specific problem is to carry traffic in channels of bandwidths which are greater than that offered by standard SDH virtual containers over disparate and heterogeneous networks.

TECHNICAL INFORMATION (continued)

No.

ID1048

(c) What other solutions have been tried and what were their shortcomings?

see previous submissions

(d) What are the specific elements or steps that solved the problem. Please provide high level details.

These have already been explained to Ewan Bewley (Harlow patents office) and Robert Franks (external patent attorney).

(e) What is the commercial value of the invention to Nortel and Nortel's major competitors? (see guidelines)

This idea is already in development and on the POR for roll out on several products during 1999.

Lucent and Alcatel will try to beat us to market with something similar.

# Additional Inventors / Contractor Information

No. ID1048

<b>(1) Full legal name of first inventor (include middle initial)</b>				<b>Residence address (and post office address if different)</b>	
Russell John Paul				21 The Orchards	
Global ID 3200755				Sawbridgeworth	
				Herts	
Phone 742-2631	Location HAL02	Department GI41	Mailstop	Occupation	Fax
Signature			Date	Citizen of UK	
<b>Contractor Information:</b>				Any other agreement(s) with your agency.	
Agency worked for				Please Make a Selection	
Non disclosure agreement with Nortel				Please specify	
Please Make a Selection					
Exhibit B of the Master Services agreement with your agency					
Please Make a Selection					

<b>(1) Full legal name of 2nd inventor (include middle initial)</b>				<b>Residence address (and post office address if different)</b>	
Goodman Mick 2712099					
Phone	Location	Department	Mailstop	Occupation	Fax
Signature			Date	Citizen of	
<b>Contractor Information:</b>				Any other agreement(s) with your agency.	
Agency worked for				Please Make a Selection	
Non disclosure agreement with Nortel				Please specify	
Please Make a Selection					
Exhibit B of the Master Services agreement with your agency					
Please Make a Selection					

<b>(1) Full legal name of 3rd inventor (include middle initial)</b>				<b>Residence address (and post office address if different)</b>	
murtion chris 1071844					
Phone	Location	Department	Mailstop	Occupation	Fax
Signature			Date	Citizen of	
<b>Contractor Information:</b>				Any other agreement(s) with your agency.	
Agency worked for				Please Make a Selection	
Non disclosure agreement with Nortel				Please specify	
Please Make a Selection					
Exhibit B of the Master Services agreement with your agency					
Please Make a Selection					

<b>(1) Full legal name of 4th inventor (include middle initial)</b>				<b>Residence address (and post office address if different)</b>	
Ramsden Chris 6161905					
Phone	Location	Department	Mailstop	Occupation	Fax
Signature			Date	Citizen of	
<b>Contractor Information:</b>				Any other agreement(s) with your agency.	
Agency worked for				Please specify	
Non disclosure agreement with Nortel				Please Make a Selection	
Please Make a Selection					
Exhibit B of the Master Services agreement with your agency					
Please Make a Selection					

**Additional Inventors / Contractor Information: (continued)**

No. ID1048

<b>(1) Full legal name of 5th inventor (include middle initial):</b>				<b>Residence address (and post office address if different)</b>	
Shields Jim 3220951					
Phone	Location	Department	Mailstop	Occupation	Fax
Signature		Date		Citizen of	
<b>Contractor Information:</b>				Any other agreement(s) with your agency.	
Agency worked for				Please Make a Selection	
Non disclosure agreement with Nortel				Please specify	
Please Make a Selection					
Exhibit B of the Master Services agreement with your agency					
Please Make a Selection					

<b>(1) Full legal name of 6th inventor (include middle initial):</b>				<b>Residence address (and post office address if different)</b>	
Phone	Location	Department	Mailstop	Occupation	Fax
Signature		Date		Citizen of	
<b>Contractor Information:</b>				Any other agreement(s) with your agency.	
Agency worked for				Please Make a Selection	
Non disclosure agreement with Nortel				Please specify	
Please Make a Selection					
Exhibit B of the Master Services agreement with your agency					
Please Make a Selection					

<b>(1) Full legal name of 7th inventor (include middle initial):</b>				<b>Residence address (and post office address if different)</b>	
Phone	Location	Department	Mailstop	Occupation	Fax
Signature		Date		Citizen of	
<b>Contractor Information:</b>				Any other agreement(s) with your agency.	
Agency worked for				Please Make a Selection	
Non disclosure agreement with Nortel				Please specify	
Please Make a Selection					
Exhibit B of the Master Services agreement with your agency					
Please Make a Selection					

<b>(1) Full legal name of 8th inventor (include middle initial):</b>				<b>Residence address (and post office address if different)</b>	
Phone	Location	Department	Mailstop	Occupation	Fax
Signature		Date		Citizen of	
<b>Contractor Information:</b>				Any other agreement(s) with your agency.	
Agency worked for				Please Make a Selection	
Non disclosure agreement with Nortel				Please specify	
Please Make a Selection					
Exhibit B of the Master Services agreement with your agency					
Please Make a Selection					